

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 4240-142 U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <div style="font-size: 1.5em; font-weight: bold;">10/580556</div>
INTERNATIONAL APPLICATION NO. PCT/KR04/01210	INTERNATIONAL FILING DATE 5/20/2004	PRIORITY DATE CLAIMED 11/27/2003
TITLE OF INVENTION NOVEL RUMEN BACTERIA VARIANTS AND PROCESS FOR PREPARING SUCCINIC ACID EMPLOYING THE SAME		
APPLICANT(S) FOR DO/EO/US Sang Yup Lee, Sang Jun Lee		

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
 - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ has been communicated by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).
 - a. ☒ is attached hereto.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☐ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☒ A power of attorney and/or change of address letter.
17. ☒ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.
18. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/580556		INTERNATIONAL APPLICATION NO. PCT/KR04/01210		ATTORNEY'S DOCKET NUMBER 4240-142	
20. Other items or information:					
The following fees have been submitted				CALCULATIONS	PTO USE ONLY
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)) \$300				\$300	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of the PCT Article 33(1)-(4) \$0 All other situations \$200				\$ 200	
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of the PCT Article 33(1)-(4). \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB. \$400 All other situations \$500				500	
TOTAL OF 21, 22 and 23 =				\$ 1000	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing IN COMPLIANCE WITH 37 cfr 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
61	-100 = 0	/50 = 0	x \$250	\$ 0	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of the commencement of the national stage (37 CFR 1.492(h)).				\$ 0	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	35 - 20 =	15	X \$50	\$ 750	
Independent claims	11 - 3 =	8	X \$200	\$1600	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$ 0	
TOTAL OF ABOVE CALCULATIONS =				\$3350	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				\$1675	
SUBTOTAL =				\$1675	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$ 0	
TOTAL NATIONAL FEE =				\$1675	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 40	
TOTAL FEES ENCLOSED =				\$1715	
				Amount to be refunded:	\$
				Amount to be charged:	\$1715.00

10/580556

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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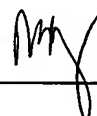
AP20 Rec'd PCT/PTO 26 MAY 2006

- a. ☐ A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3284. A duplicate copy of this sheet is enclosed.
- d. ☒ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

INTELLECTUAL PROPERTY/TECHNOLOGY LAW
P.O. Box 14329
Research Triangle Park, NC 27709-4329



SIGNATURE:

Steven J. Hultquist
NAME

28,021
REGISTRATION NUMBER

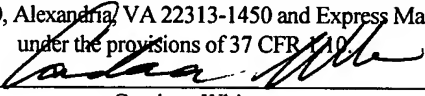
10/580556
AP20 Rec'd PCT/PTO 26 MAY 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Application of:)	Docket No.:	4240-142
Applicants:	LEE, Sang Yup, et al.)	
Application No.:	New U.S. National Stage Application of PCT International Application No. PCT/KR2004/01210)	
Date Filed:	26 May 2006)	
Priority Date:	27 November 2003 (Korean Patent Application No. 10-2003- 0084934))	
Title:	NOVEL RUMEN BACTERIA VARIANTS AND PROCESS FOR PREPARING SUCCINIC ACID EMPLOYING THE SAME)	Customer No.: 23448

EXPRESS MAIL CERTIFICATE

I hereby certify that I am mailing the attached documents to the
Commissioner for Patents on the date specified, in an envelope
addressed to Mail Stop: PCT, Commissioner for Patents, P.O.
Box 1450, Alexandria, VA 22313-1450 and Express Mailed
under the provisions of 37 CFR 1.10


Candace White

May 26, 2006
Date

EO 009 309 148 US
Express Mail Label Number

SUBMISSION OF NEW U.S. NATIONAL PHASE PATENT APPLICATION BASED ON
INTERNATIONAL PATENT APPLICATION NO. PCT/KR2004/01210)

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Sir:

Submitted herewith for filing under the provisions of 37 CFR §1.53 and 35 U.S.C. §371 is the above-referenced patent application, based on International Patent Application No. PCT/KR2004/01210 and claiming priority of Korean Patent Application No. 10-2003-0084934. A copy of the PCT International application as originally filed is included herewith. Further included is a return postcard, an Information Disclosure Statement and 14 cited references, an executed Assignment document and Assignment Recordation Cover Sheet, an executed Declaration and Power of Attorney document, a sequence listing and diskette, a Preliminary Amendment, a Credit Card Form authorizing payment in the amount of \$ 1715.00 and a 35 U.S.C. §371 transmittal form.

Please direct correspondence relating to this application to Steven J. Hultquist, Intellectual Property Technology Law, P.O. Box 14329, Research Triangle Park, NC 27709, and direct telephonic communications relating to this application to Steven J. Hultquist at (919) 419-9350.

Respectfully submitted,



Steven J. Hultquist
Reg. No. 28,021
Attorney for Applicants

**INTELLECTUAL PROPERTY/
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<p>The USPTO is hereby authorized to charge any deficiency or credit any overpayment of fees properly payable for this document to Deposit Account No. 08-3284</p>
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